

## **Lake Powell Branch Update – Thursday, August 20, 2015**

### **Lake Powell Branch Status:**

EPA R9 Operations on Lake Powell will continue for the next two weeks as an EPA R9 START contractor conducts extensive sediment and water sampling of Lake Powell with the generous support of USGS and NPS.

As this effort begins to get underway Friday, other operations at the Lake Powell Branch are winding down: OSC Dunkelman demobed this afternoon and Liaison Officer Robberson is demobing tomorrow (Friday) now that multi-agency WQ sampling coordination was completed late today and our START contractor was integrated into the USGS/NPS expedition also late today and departs tomorrow.

### **Lake Powell Sampling Expedition:**

Today the Lake Powell Branch coordinated logistics and addressed necessary details for the USGS/NPS sampling expedition beginning tomorrow.

Please note that EPA will not be integrating its sampling efforts into the USGS/NPS Mercury study, instead EPA is focusing its sampling efforts on San Juan River Gold King Mine related water and sediment quality influences on Lake Powell. EPA is participating in this expedition because it is an excellent opportunity to gain access to multiple sampling locations not readily available without long-term planning, and it provides EPA with access to boats and sediment/depth sampling equipment not readily available in normal circumstances. The Lake Powell Branch is close to completing its estimates in support of a Resource Request to the ICP.

### **Page, AZ Drinking Water Source Sampling Completed:**

The Lake Powell Branch has coordinated closely with the City of Page, AZ, and foresees no further need for periodic sampling of its raw water drinking water intake in the foreseeable future.

### **San Juan River Water Quality Analysis and Announcements:**

The Utah DEQ Division of Water Quality has been providing its Gold King Release San Juan River interpretative analysis to EPA for our own consideration and review.

At 2:00 PM PDT the Lake Powell Branch hosted the EPA Region 9 Technical Specialists, USGS, State of Arizona, State of Nevada, and State of California in the daily conference call with the Utah Division of Water Quality, Department of Environmental Quality, for the purpose of collaborating on the interpretation of all available San Juan River response sampling data.

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A big thanks to all participants for contributing their time and expertise on these collaboration calls. Thanks to the technical leadership of Harry Allen (EPA) and Erica Gaddis (Utah DEQ DWQ), the multi-agency participation over the last week was vital to an urgent and broad understanding of San Juan River WQ data analysis and interpretation.

At Lake Powell Branch request, USGS scientists Katie Walton Day, Rob Runkle and others have stepped to the plate to provide specialized technical support to EPA and Utah DWQ in stream dynamics and sediment loading. They should be especially helpful in long-term assessment of the San Juan River and Lake Powell.

Moving forward, Mike Montgomery (R9 Water Division Assistant Director) will be leading next steps in multi-agency collaborative San Juan River assessment activities, and future direction is already in the works from Mike and his staff scheduled for this next Tuesday afternoon.

Today the Lake Powell Branch also participated in the

- The Arizona Department of Emergency and Military Affairs daily call at 0800 PDT, and
- EPA's 10:30 Environmental Unit WQ data call with ATSDR, Hdqs and Regions 8 and 6, and
- Response to requests for information and updates from EPA and NPS personnel and Coconino County Representatives.

### **Utah DWQ posted its data and related explanations yesterday... highlights follow:**

DEQ scientists believe that the highest levels of contaminants associated with the initial spill event have passed through the San Juan River in Utah. DEQ makes this statement based on several considerations:

- **At all monitoring locations, the dissolved concentrations of key dissolved metals have peaked and subsequently declined to concentrations reflective of historic data and that are below established environmental screening levels.**
- Total metals concentrations are highly variable and difficult to interpret with respect to this event.
- The monsoon storm events that occurred over the last couple of weeks are characteristic, but complicate interpretation of monitoring results, especially with respect to total metals.

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- It is not currently possible to address all possible future states because the long-term effects of observed peaks remain unknown.
- The highest dissolved concentrations (peaks) of those key metals that are most strongly associated with the Gold King Mine reflect historic variability in the river.
- Over the long-term, any metals from the event that arrive in Utah will ultimately be deposited in Lake Powell. DEQ discusses its consideration of these long-term effects later in this analysis.

Utah DWQ data can be accessed at the following URL:

<http://www.deq.utah.gov/Topics/Water/goldkingmine/index.htm>

### **Lake Powell Branch Mapping Development and Support**

The Lake Powell Branch, with the support of R9 Area Command (Pete Guria), has been pulling together accurate R9 sampling map data and working with the R9 GIS team in development of Geospatial Maps for internal use/consumption depicting Lake Powell and San Juan River sampling points and related attribute data. We were told that yesterday's map has been made available on EPA's website. Please see the two **NEW AND IMPROVED** attached pdfs.

### **Lake Powell Branch NPS Support and Resource Requests**

A huge thank you to the NPS for its support to the Lake Powell Branch; the Lake Powell Branch could not have functioned without their generous support of work space, housing, boats and drivers and related logistics support.

Per Barbara's request, a Resource Request was submitted for services to be provided by the National Park Service Glen Canyon NRA Headquarters. Please note that these services have already been furnished by NPS. While NPS did not demand payment for these services, they let it be known that it would be much appreciated if EPA would reimburse them. They are not requesting payment for their daily hours, only payment for activities and costs incurred in direct support of the EPA Gold King Mine Response. NPS is preparing a cost document package to be submitted to EPA. Tom Dunkelman will provide that package to EPA as soon as it is received.

NPS provided the following to the Lake Powell Branch:

- Lodging in Page, AZ: NPS provided lodging in a house reserved for NPS staff. There were no hotel rooms available.

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- Vessel and crew: NPS provided a vessel and crew to support the three day EPA Lake Powell sampling mission. Their crew worked Overtime.
- Fuel was consumed in support of the sampling event.
- NPS provided housing at the Dangling Rope Marina for two nights.